

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 November 2006 (23.11.2006)

PCT

(10) International Publication Number
WO 2006/123188 A1

(51) International Patent Classification:

H01Q 1/00 (2006.01) G02B 5/20 (2006.01)
H01Q 1/42 (2006.01) B64G 1/22 (2006.01)
H01Q 1/28 (2006.01) G02B 5/28 (2006.01)
B32B 27/28 (2006.01)

(21) International Application Number:

PCT/GB2006/050114

(22) International Filing Date: 17 May 2006 (17.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0510317.1 20 May 2005 (20.05.2005) GB
05270017.6 20 May 2005 (20.05.2005) EP

(71) Applicant (for all designated States except US): EADS Astrium Limited [GB/GB]; Gunnels Wood Road, Stevenage Hertfordshire SG1 2AS (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BROOKS, Paul, Joseph [GB/GB]; c/o EADS Astrium Limited, Gunnels Wood Road, Stevenage Hertfordshire SG1 2AS (GB).

(74) Agent: BAE SYSTEMS plc, Group IP Dept.; P.O. Box 87, Lancaster House, Farnborough Aerospace Centre, Farnborough Hampshire GU14 6YU (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

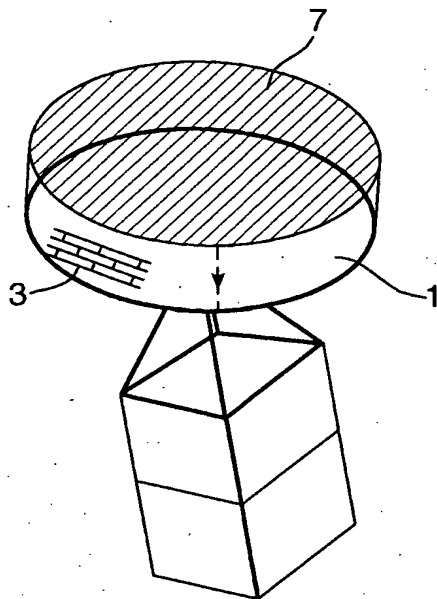
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERMAL CONTROL FILM FOR SPACECRAFT



(57) Abstract: A thermal control film for use in spacecraft comprising a multi-layer interference filter adapted to exhibit high reflectivity to solar radiation, low absorptivity across the microwave spectrum and high emissivity in the far infrared is provided. The film is free from metal and extends over the active face of an antenna carried by the spacecraft. Such a film exhibits the desired thermo-optical properties for a thermal control radiator surface and can be used over the active face of a communications or radar antenna without disrupting the RF signal.

WO 2006/123188 A1